
State Water Resources Control Board

STATE WATER RESOURCES CONTROL BOARD DIVISION OF WATER RIGHTS STAFF REPORT February 12, 2021

SUBJECT

PUBLIC WORKSHOP ON STATUS OF PHASE 1 OF THE SALTON SEA
MANAGEMENT PROGRAM

Introduction

This staff report provides information to interested parties who may participate in the annual workshop on the status of the Salton Sea Management Program (SSMP) as part of the State Water Resources Control Board's (State Water Board) oversight role of the SSMP. This report provides background information on relevant water right actions to the SSMP, summary of the Salton Sea and its current conditions, recent SSMP actions, and other items related to the State Water Board's oversight role on the SSMP.

Water Rights Order WRO 2017-0134

On October 28, 2002, the State Water Board issued [Water Rights Order \(WRO\) 2002-0013](#) which approved the long-term transfer of water from the Imperial Irrigation District (IID) to the San Diego County Water Authority, the Coachella Valley Water District, and the Metropolitan Water District of Southern California. On December 20, 2002, the State Water Board issued [Order WRO 2002-0016](#), which [revised Order WRO 2002-0013](#).

On November 18, 2014, IID filed a Petition for Change seeking modification of Revised Order WRO 2002-0013. In May 2015, Governor Edmund G. Brown, Jr. established the Salton Sea Task Force to identify realistic short- and medium-term goals to respond to potential air quality and ecological impacts resulting from reduced flows of fresh water to the Salton Sea. As a part of the Salton Sea Task Force, the State Water Board regularly monitored and assessed progress on the implementation of the Salton Sea Task Force's SSMP and held workshops on March 18, 2015, January 5, 2016, April 19, 2016, November 15, 2016, and September 7, 2017. On November 7, 2017, the State Water Board adopted [Order WRO 2017-0134](#) amending revised Order WRO 2002-0013 to incorporate additional conditions that set forth specific restoration milestones (see Table 1) to address public health and environmental concerns within [Phase 1 of the SSMP](#).

WRO 2017-0134 requires that the State Water Board hold a public meeting during each year of Phase 1 of the SSMP to receive oral and written comment on the status of Salton Sea restoration. The order also requires a report from the California Natural Resources Agency (CNRA), due in the 1st quarter of 2021, to identify:

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

- (i) completed projects and milestones achieved in the prior year;
- (ii) amount of acreage of completed projects that provide dust suppression and habitat restoration, broken down by habitat type;
- (iii) upcoming projects to be completed and milestones to be achieved prior to the next annual progress report;
- (iv) the status of financial resources and permits that have not been secured for future projects;
- (v) any anticipated departures from the dates and acreages identified in condition 24 of the order (see table 1);
- (vi) progress toward development of the long-range plan described in condition 26 of the order, and;
- (vii) in the event an annual milestone shortfall exceeds 20 percent of a year's annual obligation, a plan that will cure the deficiency within 12 months.

WRO 2017-0134 also requires that no less than 50 percent of the annual milestones shall provide habitat benefits for fish and wildlife that depend on the Salton Sea ecosystem.

Table 1: Specific restoration milestones to address public health and environmental concerns within Phase 1 of the SSMP.

Year	Total number of acres of habitat and dust-suppression projects that shall be completed each year (annual milestones).	Cumulative acreage by the end of each year.
2018	500	500
2019	1,300	1,800
2020	1,700	3,500
2021	3,500	7,000
2022	1,750	8,750
2023	2,750	11,500
2024	2,700	14,200
2025	3,400	17,600
2026	4,000	21,600
2027	4,000	25,600
2028	4,200	29,800

Total acres to be completed by the end of 2020: 3,500.

The Salton Sea

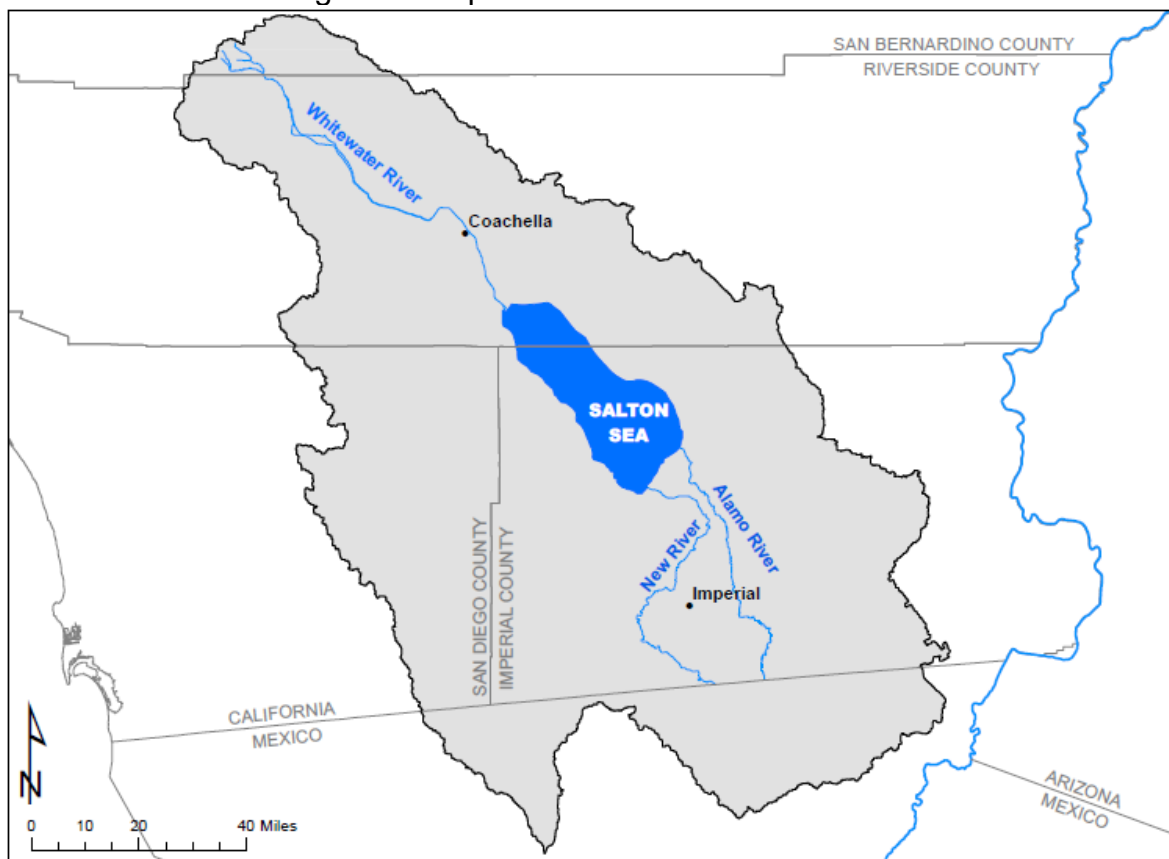
Description of the Salton Sea

Located in the Salton Basin (part of the Colorado River delta), the Salton Sea is California's largest lake, with a surface elevation of approximately 228 feet below sea level. The Salton Sea watershed encompasses an area of approximately 8,000 square miles from San Bernardino County to the Mexicali Valley. The Salton Sea lies at the lowest point in the Salton Basin and collects runoff and agricultural drainage from most of Imperial County, a portion of Riverside County, smaller portions of San Bernardino

and San Diego Counties, as well as the northern portion of the Mexicali Valley (see Figure 1).

Over the last several hundred thousand years, the Colorado River has periodically meandered west to fill the Salton Basin, creating ancestral freshwater lakes that ultimately evaporated after the river meandered back towards the east. The Salton Sea was formed in 1905 when massive flooding caused the Colorado River to break through an irrigation canal to flow uncontrolled directly into the Salton Basin for 18 months. Once the breach in the irrigation canal was fixed, the Salton Sea has been primarily sustained by agricultural drain water, approximately 80 percent of which flows from the Imperial Valley. As the Salton Sea has no outlets, salts concentrate in it and nutrients enhance the formation of eutrophic conditions. Currently, the Salton Sea has a salinity level that is approximately 50 percent higher than the ocean. The Salton Sea is a critical stop on the Pacific Flyway for migrating birds, including several threatened and endangered species.

Figure 1: Map of the Salton Sea Watershed



Environmental Conditions of the Salton Sea

The environmental conditions are changing rapidly within the Salton Sea watershed caused by water transfers under the [Quantification Settlement Agreement](#) and water management planning within Coachella, Imperial, and Mexicali Valleys. There will be a reduction of inflows to the Salton Sea as time progresses, and it will result in declining surface water elevations and increased salinity at the Salton Sea. The current conditions

of the Salton Sea, provided by the Pacific Institute at <https://pacinst.org/current-information-salton-sea/>, as of February 7, 2021, are as follows:

Salton Sea elevation: **-238.29 feet, National Geodetic Vertical Datum (NGVD) 1929**

Surface water elevation on January 25, 2003 Baseline: **-228.9 feet, NGVD 1929**

Change from 2003 elevation: **-9.4 feet**

Reduction in Salton Sea area: **24,100 acres (38 sq. miles)**

IID Dust Control Projects: **2,400 acres**

SSMP Dust Control Project: **698 acres**

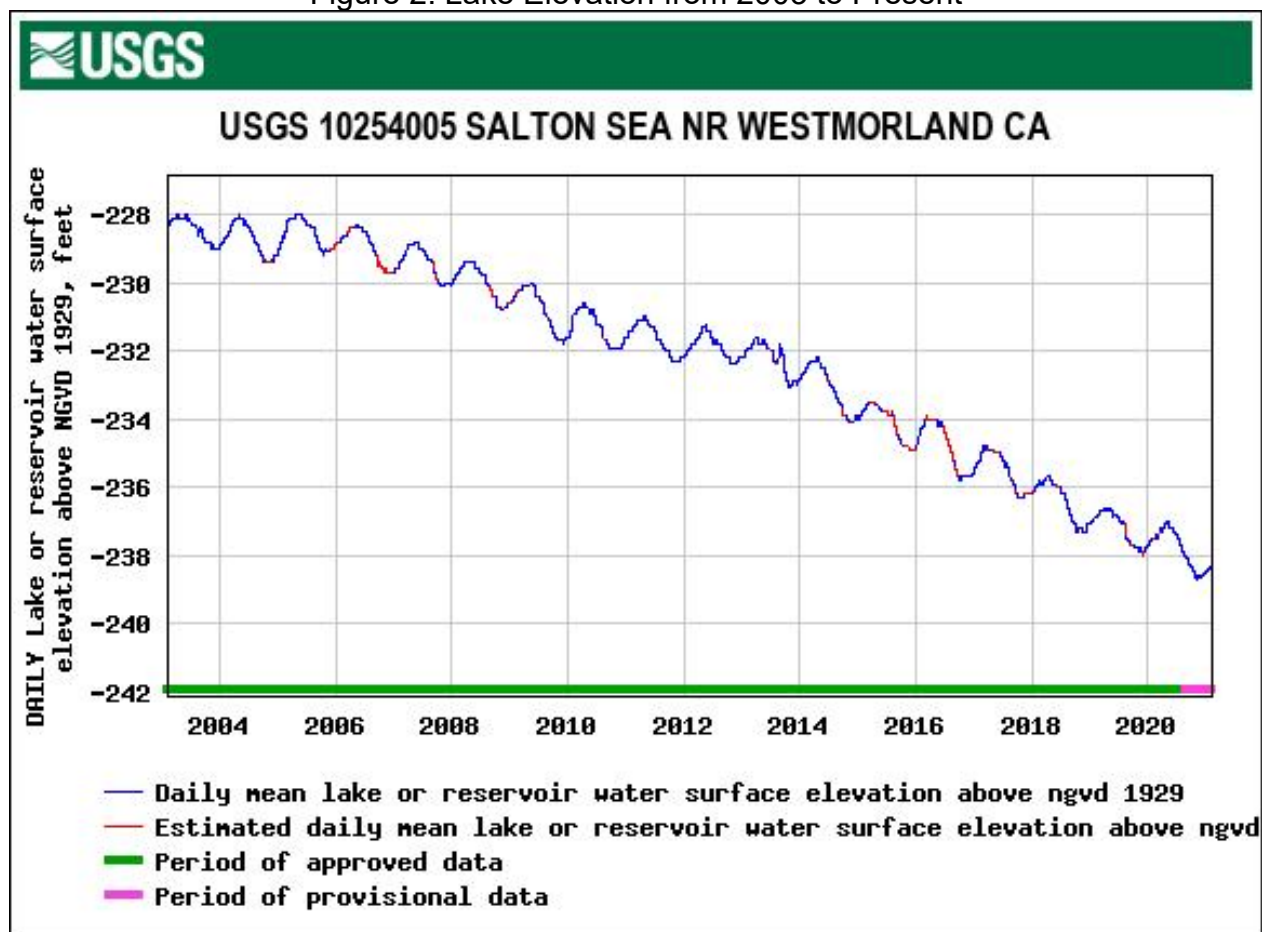
Habitat Projects: **0 acres**

Revegetation atop playa: **4,722 acres**

Net Exposed Playa: **~15,250 acres (24 sq. miles)**

Since 2003, there has been a steady decline in the surface water elevation of the Salton Sea which continued to decline during 2020 (see Figure 2).

Figure 2: Lake Elevation from 2003 to Present



Data available from: https://waterdata.usgs.gov/ca/nwis/uv?site_no=10254005

Salton Sea Management Program (SSMP)

The SSMP is implemented by CNRA through the Department of Water Resources and Department of Fish and Wildlife.

Funding for the SSMP

Additional funding was made available in 2020 for Salton Sea projects. From Proposition 68 bond funds, \$19.3 million was provided to address the air quality and habitat restoration objectives associated with implementation of the North Lake Pilot Project. On October 29, 2020, the Salton Sea Authority Board of Directors authorized the Salton Sea Authority's Executive Director to enter into a funding agreement with the California Department of Water Resources to receive a Proposition 68 Local Assistant Grant in the approximate amount of \$19,250,000 to implement the North Lake Pilot Project. The North Lake Pilot Project is a 156-acre project located near the community of North Shore which would create new deep-water habitat to replace the habitat lost as the Salton Sea recedes. It would also create shallow habitat that would suppress dust along over one mile of receding shoreline.

Not specifically part of the SSMP, but connected to the Salton Sea, is the New River Improvement Project which received \$18 million as a one-time General Fund allowance and \$10 million from Proposition 68 bond funds. On November 18, 2020, the City of Calexico approved a resolution authorizing the City of Calexico to enter into a funding agreement with the California Department of Water Resources for the New River Implementation Project. The New River Project will install a trash screen just north of the US/Mexico border, bypass river water via an encased channel, and reroute existing wastewater discharge to a point just below the trash screen. These improvements are being implemented to address the public health threat posed by the water quality in the New River flowing next to Calexico.

Staff Oversight Activities of the SSMP Since August 19, 2020 Workshop

The State Water Board held a virtual public workshop regarding the Salton Sea as required by WRO 2017-0134 on August 19, 2020. Written and oral comments were provided by several state and local entities, interested parties, and members of the public. Since the August 19, 2020 workshop, State Water Board Staff attended virtual public workshops for the SSMP held late September 2020 regarding the draft project description that will be used in the National Environmental Protection Act document by the U.S. Army Corps of Engineers. Staff also attended the SSMP Community Engagement Committee meetings on September 30th and December 17th, 2020.

Staff also attended a federal congressional hearing on September 29, 2020 on the Salton Sea before the U.S. House Natural Resources Committee's Subcommittee on Water, Oceans, and Wildlife. California Natural Resources Agency Secretary Wade Crowfoot and the State Water Resources Control Board Chair Joaquin Esquivel testified on federal and state efforts to improve conditions at the Salton Sea. The hearing focused on how the federal government can partner with California to invest resources and implement other efforts to address air quality impacts and loss of habitat. Written testimony and video of the hearing can be found here:

<https://naturalresources.house.gov/hearings/federal-and-state-efforts-to-restore-the-salton-sea>.

SSMP Annual Report

As of the date of this staff report, the SSMP annual report has yet to be released. Below is a summary of items and actions that State Water Board staff have tracked as progress in implementing the SSMP since August 19, 2020:

Projects completed in 2020

CNRA completed 698 acres of temporary surface roughening projects at the southern end of the Salton Sea in 2020 as an interim proactive measure to treat areas of exposed lakebed with emissivity potential due to dropping sea levels. Work completed included the 112-acre Bruchard Road Dust Suppression Project (January 2020), the 306-acre New River East Project (November 2020) and the 280-acre New River West Project (December 2020). These three temporary surface roughening projects are located within the footprint of the Species Conservation Habitat (SCH) project, and once the SCH project is completed by the California Department of Water Resources (DWR), the land these projects covered will be permanently inundated with water upon the completion of the SCH project.

Community Engagement Plan

CNRA continued to make progress towards developing a [draft community engagement plan](#) which was the main topic of discussion during the September 30, 2020 SSMP Community Engagement Committee meeting. On December 17, 2020, discussion continued on the draft community engagement plan and development of a [committee charter](#).

Species Conservation Habitat Project Begins Construction

In January 2021, construction began on CNRA's first large-scale project, implemented by the DWR, to create habitat and reduce exposed lakebed around the Salton Sea. The SCH project, located at the southern end of the Salton Sea on both sides of the New River, will create a network of ponds and wetlands to provide important fish and bird habitat and suppress dust emissions to improve regional air quality as the Salton Sea recedes. The SCH project will cover approximately 4,110 acres, an increase over the previously estimated 3,770 acres due to an updated design. Construction is expected to continue through the end of 2023. Initial onsite work began in late Fall 2020, and in early 2021, DWR's design-build contractor, Kiewit Infrastructure West Co., began clearing vegetation and constructing an interception ditch to drain the site. The contractor also began construction of a southern habitat berm.

Summary

The annual report, as required by WRO 2017-0134, has yet to be released by CNRA as of the date of preparation for this staff report. Once released, the annual report will be made available on [CNRA's Salton Sea website](#) and the [State Water Board's Salton Sea webpage](#). CNRA will present information from their report during the March 17, 2020 workshop.